

**ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM**

Plant Abstract

Element Code: PDLAM1S2F1

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Salvia pachyphylla* ssp. *eremopictus*
COMMON NAME: Arizona Rose Sage
SYNONYMS: *Salvia compacta*, *S. carnosa* var. *compacta*
FAMILY: Lamiaceae

AUTHOR, PLACE OF PUBLICATION: Taylor, Robin M. Madrono 53(1): 21-22.
2006.

TYPE LOCALITY: Arizona, Navajo County, 16.5 mi N or I-40 on Hwy 87, just past mile marker 362 on W side of Rd. 2.5 mi N of Little Painted Desert State Park. 12S 550587 3893128.

TYPE SPECIMEN: Deaver Herbarium, Northern Arizona Univ.: ASC 79245. R.M. Taylor, #4, October 28, 1999.

TAXONOMIC UNIQUENESS: *Salvia* is a large genus with over 50 species, numerous varieties and subspecies and even several hybrids. The species *S. pachyphylla* is found in California, Nevada and Arizona, but the subspecies *S. P. eremopictus* is endemic only to NE Arizona.

DESCRIPTION: Much branched, spreading shrubs, 35 – 50 cm tall, 30-150 cm wide; leaves spatulate, opposite, 2 – 4.4 cm long, 0.6 – 1.7 cm wide with axillary fascicles, cinereous, canescent, glandular; inflorescences verticillate, conspicuously bracteate; bracts scarious, purple to rose, 0.83 – 1.4 cm long, 0.35 – 0.92 cm wide; flowers violet, 1.3-2.45 cm long. Roth 2001.

AIDS TO IDENTIFICATION: Distinct from other members of the *S. dorri* complex by its larger leaves, a larger inflorescence and has a villous ring of hairs within the corolla tube (Roth 2001). *S. p.* ssp *eremopictus* is the only *S. pachyphylla* subspecies found in Arizona (Taylor and Ayers 2006).

ILLUSTRATIONS:

Photo: <http://www.nndfw.org/nnhp/Plants/sapaer.pdf>.

TOTAL RANGE: Endemic to northeast Arizona.

RANGE WITHIN ARIZONA: NE Arizona, from Meteor Crater to Petrified Forest National Park, and north to Hopi Buttes locality (Coconino, Navajo and Apache Counties).

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Many branched, spreading perennial shrub, to 0.5 m tall and 1.5 m wide.

PHENOLOGY: Flowering: July to October (Roth 2001). Both flowers and fruits were noted in Arizona collections made between the end of June and mid-July, and flowers were also noted towards the end of August. An early September collection noted that the plant was post-flowering, and seeds were noted from a collection made towards the end of October.

BIOLOGY:

HABITAT: Desert shrubland and Pinyon-Juniper communities. On the Navajo Nation, often found along the base of volcanic plugs, mesa tops and slopes.

ELEVATION: Roth 2001: 5500-6500 feet (1675-1980m). One Arizona collection extends this published range to 6620 feet (2018m).

EXPOSURE: Not specified, but based on some Arizona collections, there may be a preference for the more mesic slopes (facing N, NW and E).

SUBSTRATE: Basalt or soils derived from the Chinle Formation. Arizona collections also noted rocky sandy soil, limestone soil, brown sandy soil on eroding hills, a gravelly wash bottom, and soil derived from a dark gray volcanic rock with large chips of limestone.

PLANT COMMUNITY: Desert scrubland and Pinyon-Juniper communities. Plants associated with Arizona collections include: *Atriplex canescens*, *Petradoria pumila*, *Bouteloua gracilis*, *Artemisia tridentata*, *Opuntia* sp., *Juniperus monosperma*, *Ephedra viridis*, *E. torreyana*, *Cylindropuntia whipplei*, *Pinus stansburiana*, *Eriogonum*, *Hilaria*, *Thelesperma*, *Yucca angustissima*, *Pinus edulis*, *Purshia stansburiana*, *Brickellia microphylla*, *Stephanomeria pauciflora*.

POPULATION HISTORY AND TRENDS: Unknown for Arizona. However, the species has been collected from the Meteor Crater locality for 70 years starting in 1929, suggesting a possibly stable trend. There was another 1989 collection, and then the remaining seven collections date from 1998 to 2011. One of these reported a "large population", while another noted about 200 plants that were "highly localized." NatureServe considers the species to be critically imperiled, but that designation was when there were only two known collections.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None.
STATE STATUS: None.
OTHER STATUS: NESL 4 (Navajo Endangered Species List, 9-10-2008).

MANAGEMENT FACTORS: None specified.

PROTECTIVE MEASURES TAKEN: None specified.

SUGGESTED PROJECTS: Expand surveys to better determine distribution of this subspecies.

LAND MANAGEMENT/OWNERSHIP: The majority (5) of the known collection sites are on BIA – Navajo Nation lands. Two sites are within the USNPS Petrified Forest National Park and one site is on private land.

SOURCES OF FURTHER INFORMATION**REFERENCES:**

JStor| Global Plants accessed 10-22-2014, <http://plants.jstor.org/specimen/asc00079245?s=t>.
Roth, Daniela. 2001. Species account for *Salvia pachyphylla* ssp. *eremopictus*. Navajo Nation Heritage Program, Window Rock, AZ. <http://www.nndfw.org/nnhp/Plants/sapaer.pdf>.
Taylor, Robin M. and Tina J. Ayers. 2006. Systematics of *Salvia pachyphylla* (Lamiaceae). Madrono, Vol 53(1): 11-24.
Tropicos, accessed 10-22-2014, <http://www.tropicos.org/Name/100254047>.

MAJOR KNOWLEDGEABLE INDIVIDUALS:**ADDITIONAL INFORMATION:**

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